

**REMARKS/ARGUMENTS**

Claims 1-10 are pending in the application. Claim 1 is amended, claims 4-9 are withdrawn from consideration and claim 10 is added. Claims 1-3 were rejected.

The following remarks are believed to be fully responsive to the Office Action, and to render all the claims at issue patentably distinguishable over the cited references. Reconsideration of this application is respectfully requested.

**CLAIM REJECTIONS – 35 U.S.C. §103**

Claims 1-3 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Takashima (US 005903492A) in view of Summerfelt (US 005585300A) and Onishi (US 005708284A). The rejection is respectfully traversed.

Applicant respectfully submits that Takashima does not show the (3), (5), (7), (8), (10), (11), (12) of the amended claim 1.

Takashima teaches or suggests that ferroelectric capacitor has a first terminal connected to said source terminal and a second terminal connected to said drain terminal. Further, Takashima teaches or suggests that one or more select transistors are connected to at least one terminal of said plurality of series connected memory cells to constitute a memory cell block, said memory cell block having one terminal connected to a bit line and another terminal connected to a plate electrode.

But, in accordance with an embodiment of the present invention, the first electrodes are

formed over the wordlines. The ferroelectric film and the second electrodes can be sequentially formed at sides and top of the first electrodes and the plugs are respectively formed for connecting the source and drain regions to the second electrodes adjacent to the source and drain regions. That is to say, the second electrodes and the plugs can be respectively connected to the source and drain regions.

Applicant respectfully submits that Summerfelt and Onishi do not show the remaining recited features of the amended claim 1 excluding the (5)th of the amended claim 1.

Accordingly, Applicant believes that features recited in claim 1 and combinations thereof are distinguishable from the cited references, individually or in combination.

Therefore, reconsideration of the independent claim 1 is respectfully requested. Also, Reconsideration of all the dependent claims to the independent claim 1 is respectfully requested. Withdrawal of the rejection of claims 1-3 under 35 U.S.C. §103 is respectfully requested.

#### **New Claims**

Claim 10 is newly added and believed to be in condition for allowance.

Applicant respectfully submits that Takashima does not teach or suggest at least features wherein the ferroelectric capacitor first electrodes are electrically connected to the wordlines formed underneath through the barrier metal and combinations thereof as recited in claim 10. In contrast, Takashima discloses wordlines insulated from capacitor first and second electrodes. See for example WL01 and SN01, SN02 in Figures 5A-6B of Takashima. Further, Applicant respectfully submits that modifying Takashima to couple the wordlines and the capacitor first

electrodes as asserted by the Office Action detracts from the functioning of Takashima. See page 5, lines 7-25 of the Office Action. For example, Applicant respectfully submits that independent wordline, plate line and bit line values used to control data reading/writing in accordance with conventional schemes illustrated in Figures 3A or 3B-3C cannot be maintained. See column 23, lines 15-24 and column 23 line 38 - column 25 line 29 of Takashima. Thus, Applicant respectfully submits that Takashima does not teach or suggest at least a feature where the ferroelectric capacitor first electrodes are electrically connected to the wordlines formed underneath and combinations thereof as recited in claim 10.

Accordingly, Applicant respectfully submits that it would not have been obvious to combine Onishi and/or Summerfelt with Takashima as modifying in the manner suggested by the Office Action would detract from the functioning of Takashima. In particular, Takashima teaches the wordlines are insulated from ferroelectric capacitor (first or second) electrodes. See at least Figures 6B, 7B, 27B, 28B, 29A-D, 74A, 75A, 76A, 77A, 102 of Takashima. With respect to embodiments of Summerfelt that disclose a barrier layer 34 (for substantially inhibiting oxygen from diffusing down to underlying materials) being conductive such as Figures 8-9, Applicant respectfully submits that such a modification would detract from the functioning of Takashima. With respect to the embodiments of Onishi that discloses a capacitor portion with a bottom electrode 8 on a bottom gate electrode 5b, Applicant respectfully submits that such a modification would detract from the functioning of Takashima. Thus, Applicant respectfully submits that it would not have been obvious to combine Onishi and/or Summerfelt with

Serial No. 10/747,944  
Reply to Office Action of July 23, 2004

Docket No. HME/K-0010V

Takashima since there is no motivation provided in the references for the asserted combination.

As described above, Takashima teaches isolating wordlines from the capacitor first and second electrodes. Thus, Applicant respectfully submits the rejection under 35 U.S.C. §103(a) citing Onishi and/or Summerfelt is improper as Takashima teaches away from such a combination and therefore, Onishi, Summerfelt and Takashima, individually or in combination would not result in a least a feature of ferroelectric capacitor first electrodes electrically connected to the wordlines formed underneath and combinations thereof as recited in claim 10.

### **CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **Carl R. Wesolowski**, at the telephone number listed below.

Serial No. 10/747,944  
Reply to Office Action of July 23, 2004

Docket No. HME/K-0010V

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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